



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY.'S DOCKET: PITSON=1A

In re Application of:	)	Art Unit:
	)	
Stuart PITSON et al	)	Examiner:
	)	
Appln. No.: 10/642,289	)	Washington, D.C.
	)	
Filed: August 18, 2003	)	November 17, 2003
	)	
For: SPHINGOSINE KINASE ENZYME	)	Confirmation No.:
	)	
	)	

INFORMATION DISCLOSURE STATEMENT [IDS]

Honorable Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir :

This Information Disclosure Statement is submitted in accordance with 37 CFR §§1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

[X] 1. This IDS should be considered, in accordance with 37 CFR §1.97, as it is filed within three months of the filing date of the above-identified national application or within three months of the entry into the national stage of the above-identified international application.

[X] 2. In accordance with 37 CFR §1.98, this IDS includes a list (e.g., form PTO/SB/08A) of all patents, publications, or other information submitted for consideration

by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document listed is attached.

[X] 3. No explanation of relevance is necessary for documents in the English language (see reply to Comments 67 and 68 in the preamble to the final rules; 1135 OG 13 at 20).

[ ] 4. Other information being provided for the examiner's consideration follows:

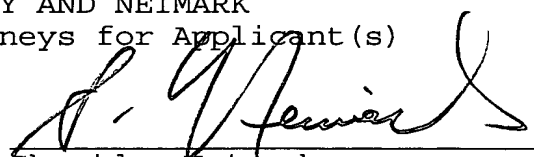
*(insert other information)*

5. In accordance with 37 CFR §§1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of publication indicated for an item is taken from the face of the item and Applicants reserve the right to prove that the date of publication is in fact different.

Respectfully submitted,

BROWDY AND NEIMARK  
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 1

of

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**Complete if Known**

Application Number	10/642,289
Filing Date	August 18, 2003
First Named Inventor	Stuart PITSON et al
Group Art Unit	
Examiner Name	
Attorney Docket Number	PITSON=1A

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	AM	ALTSCHUL, S., et al; "Basic Local Alignment Search Tool"; <i>J. MOL. BIOL.</i> (1990); Vol. 215; pages 403-410.	
	AN	Alessenko; A. V., "REVIEW: Functions of Sphingosine in Cell Poliferation and Death"; <i>BIOCHEMISTRY</i> (1998); Vol. 63; pages 62-68; [online] [retrieved on August 28, 2003]. Retrieved from Internet: <URL: <a href="http://www.protein.bio.msu.su/biokhimiya/contents/v63/full/63010075.htm">http://www.protein.bio.msu.su/biokhimiya/contents/v63/full/63010075.htm</a> >	
	AO	BONNER; T., "Reduction in the Rate of DNA Reassociation by Sequence Divergence"; <i>MOL. BIOL.</i> (1973); Vol. 81; pages 123-135.	
	AP	BRADFORD; M., "A Rapid and Sensitive Method for the Quantitation of Microgram Quantities of Protein Utilizing the Principle of Protein-Dye Binding"; <i>ANALYTICAL BIOCHEMISTRY</i> (1976); Vol. 72; pages 248-254.	
	AQ	BUEHRER, Benjamin and Robert Bell; "Inhibition of Sphingosine Kinase <i>in Vitro</i> and in Platelets"; <i>JOURNAL OF BIOLOGICAL CHEMISTRY</i> (1992); Vol. 267; No. 5, pages 3154-3159;	
	AR	BUEHRER, Benjamin and Robert Bell; "Sphingosine Kinase: Properties and Cellular Functions"; <i>ADVANCES IN LIPID RESEARCH</i> (1993); Vol. 26; pages 59-67;	
	AS	BUEHRER, B., et al; "Protein Kinase C-dependent Regulation Of Human Erythroleukemia (HEL) Cell Sphingosine Kinase Activity"; <i>BIOCHIMICA ET BIOPHYSICA ACTA</i> (1996); Vol. 1303; pages 233-242.	
	AT	CUVILLIER et al; "Suppression of Ceramide-Mediated Programmed Cell Death by Sphingosine-1-phosphate"; <i>NATURE</i> (1996); Vol. 381; pages 800-803.	
	AU	DOUILLARD et al; "Basic Facts About LYMPHOCYTE HYBRIDOMAS"; <i>BASIC FACTS ABOUT HYBRIDOMAS IN COMPENDIUM OF IMMUNOLOGY</i> (1981); Vol. II; pages 119-219; ed. Schwartz.	
	AV	DUGGLEBY, R.G., "A Nonlinear Regression Program for Small Computers"; <i>ANALYTICAL BIOCHEMISTRY</i> (1981); Vol. 110; pages 9-18;	
	AW	GRAHAM, F. L. and A. Van Der Eb; "Transformation of Rat Cells by DNA of Human Adenovirus 5"; <i>VIROLOGY</i> (1973); Vol. 54; pages 536-539;	
	AX	HANKS, S.K., et al; "Conserved Features of the Catalytic Domains"; <i>SCIENCE</i> (1988); Vol. 241; pages 42-52.	

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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	AY	IGARASHI; Yasuyuki, "Functional Roles of Sphingosine 1-Phosphate, and Methylsphingosines: In Regard to Membrane Sphingolipid Signaling Pathways"; <i>J. BIOCHEM.</i> (1997); Vol. 122; pages 1080-1087.	
	AZ	KOHAMA et al; "Molecular Cloning and Functional Characterization of Murine Sphingosine Kinase"; <i>JOURNAL OF BIOLOGICAL CHEMISTRY</i> (1998); Vol. 273; No. 37, pages 23722-23728.	
	BA	KOHLER et al; "Continuous Cultures Of Fused Cells Secreting Antibody Of Predefined Specificity"; <i>NATURE</i> (1975); Vol. 256; pages 495-499.	
	BB	LAEMMLI; U. K., "Cleavage of Structural Proteins During the Assembly of the Head of Bacteriophage T4"; <i>NATURE</i> (August 15, 1970); Vol. 227; pages 680-685.	
	BC	LOUIE, D. D., et al; "Sphingolipid Base Metabolism: Partial Purification and Properties of Sphinganine Kinase Of Brain"; <i>THE JOURNAL OF BIOLOGICAL CHEMISTRY.</i> (August 10, 1976); Vol. 251; No. 15 pages 4557-4564.	
	BD	MASAI et al; " <i>Drosophila</i> retinal degeneration A gene encodes an eye-specific diacylglycerol kinase with cysteine-rich zinc-finger motifs and ankyrin repeats"; <i>PROC. NATL. ACAD. SCI. USA</i> (1993); Vol. 90; pages 11157-11161.	
	BE	MELLENDEZ et al; "FcγRI Coupling to Phospholipase D Initiates Sphingosine Kinase-mediated Calcium Mobilization and Vesicular Trafficking"; <i>JOURNAL OF BIOLOGICAL CHEMISTRY</i> , (1998).; Vol. 273; No. 16, pages 9393-9402.	
	BF	MEYER ZU HERINGDORF et al; "Molecular Diversity of Sphingolipid Signalling"; <i>-FEBS LETTERS</i> (1997); Vol. 410; pages 34-38.	
	BG	NAGIEC et al; "The <i>LCB4 (YOR171c)</i> and <i>LCB5 (YLR260w)</i> Genes of <i>Saccharomyces</i> Encode Sphingoid Long Chain Base Kinases"; <i>JOURNAL OF BIOLOGICAL CHEMISTRY</i> , (1998); Vol. 273; No. 31, pages 19437-19442.	
	BH	OLIVERA et al; "Sphingosine-1-phosphate as second Messenger in Cell Proliferation Induced by PDGF and FGS Mitogens"; <i>NATURE</i> (7 October 1993); Vol. 365; pages 557-560.	
	BI	OLIVERA et al; "Purification and Characterization of Rat Kidney Sphingosine Kinase"; <i>THE JOURNAL OF BIOLOGICAL CHEMISTRY</i> , (May 15, 1998); Vol. 273; No. 20, pages 12576-12583.	
	BJ	PONTING et al; "SMART: Identification And Annotation Of Domains From Signalling And Extracellular Protein Sequences."; <i>NUCLEIC ACIDS RESEARCH</i> (1999); Vol. 27; No. 1, pages 229-232.	

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Examiner Name	
Attorney Docket Number	PITSON=1

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	BK	R. REN et al; "Identification of a Ten-Amino Acid Proline-Rich SH3 Binding site"; <i>SCIENCE</i> (February 19, 1993); Vol. 259; pages 1157-1161.	
	BL	RHOADS et al; "Sequence Motifs For Calmodulin Recognition"; <i>FASEB JOURNAL</i> (1997); Vol. 11; pp. 331-340.	
	BM	SAKANE et al; "The C-terminal Part Of Diacylglycerol Kinase $\alpha$ Lacking Zinc Fingers Serves As A Catalytic Domain"; <i>BIOCHEM. J.</i> (1996); Vol. 318; pages 583-590.	
	BN	SARASTE et al; "The P-loop-a Common Motif in ATP- and GTP- Binding Proteins" <i>TRENDS BIOCHEM. SCI.</i> (November 1990); Vol. 15; pages 430-434.	
	BO	SCHAAP et al; "Consensus Sequences for ATP-binding Sites In Protein Kinases Do Not Apply To Diacylglycerol Kinases"; <i>BIOCHEMICAL JOURNAL</i> (1994); Vol. 304; pages 661-662.	
	BP	J. SCHULTZ et al; "SMART, A Simple Modular Architecture Research Tool: Identification Of Signaling Domains"; <i>Proc. Natl. Acad. Sci., USA</i> , (1998); Vol. 95; pages 5857-5864.	
	BQ	SMITH et al; "Measurement of Protein Using Bicinchoninic Acid"; <i>ANALYTICAL BIOCHEMISTRY</i> (1985); Vol. 150; pp. 76-85.	
	BR	SPIEGEL et al; "REVIEW: Roles of Sphingosine-1-phosphate in Cell Growth, Differentiation and Death"; <i>Biochemistry (Mosc)</i> (1998); Vol. 63; pages 69-73; [online] [retrieved on August 28, 2003]. Retrieved from Internet: <URL: <a href="http://www.protein.bio.msu.su/biokhimiya/contents/v63/full/63010083.htm">http://www.protein.bio.msu.su/biokhimiya/contents/v63/full/63010083.htm</a> >	
	BS	WALKER et al; "Distantly Related Sequences in the $\alpha$ - and $\beta$ -subunits of ATP Synthase, Myosin, Kinases And Other ATP-Requiring Enzymes And A Common Nucleotide Binding Fold"; <i>EMBO J.</i> , (1982); Vol. 8; pages 945-951; IRL Press Limited, Oxford, England.	
	BT	WALL et al; "Factors Influencing Endothelial Cell Proliferation In Vitro"; <i>J. CELL. PHYSIOL.</i> , (1978); Vol. 96; pages 203-213.	
	BU	WESSEL et al; "Method for the Quantitative Recovery of Protein in Dilute Solution in the Presence of Detergents and Lipids"; <i>ANALYTICAL BIOCHEMISTRY</i> , (1984); Vol. 138; pages 141-143.	
	BV	XIA et al; "Tumor Necrosis Factor $\alpha$ Induces Adhesion Molecule Expression Through The Sphingosine Kinase Pathway"; <i>PROC. NATL. ACAD. SCI. USA</i> (November, 1998); Vol. 95; pages 14196-14201; The National Academy of Sciences.	

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